Remarks

The Applicant requests reconsideration of original claims 1-14, 16-22, 24-26, 28 and amended claims 15 and 27.

Applicant requests that the application be amended as above described.

Applicant has amended the disclosure on page 16 to update reference to the Patent Application number and title, now issued to patent.

Applicant has cancelled the inadvertently omitted claim 23 to overcome the cited informality.

Applicant has amended the dependencies of claims 15, 26 and 27 to overcome the Examiner's objections to the cited informalities.

In the Office Action, the Examiner rejected claims 1-22 and 24-28 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,061,505, (Pitchaikani et al) in view of U.S. Patent No. 5,933,416 (Schenkel et al.). Applicant has considered the Examiner's objection but respectfully requests reconsideration for the reasons outlined below.

In the present invention as recited in claims 1-22 and 24-28 and as described in the application, logical connection parameters are used to predict the network topology. Applicant notes that this prediction of network topology does not require stable traffic monitoring data as in the cited references. These logical connection parameters, in one embodiment, for example, are listed in the specification on page 8, lines 5-28 and include information such as the channel within the payload that the CTP is associated based upon the well-known JKLM indexing scheme, port user labels and span IP addresses. Applicant further notes that this is not traffic monitoring data. By processing the said logical connection parameters, even in the absence of stable traffic, an advantage of the current invention is described in the specification at page 3, lines 22-24, which states "it is easier to determine which ports are logically similar, and predicting physical connections between ports by finding, for each port within the network, at least one other port that is logically similar.". Therefore, the current invention provides a means of predicting network

topology, even when traffic monitoring data is not available or unstable. As previously mentioned, such a prediction mechanism does not rely on stable traffic monitoring data.

Applicant respectfully submits that Pitchaikani et al. does not disclose or teach a method or apparatus to predict the topology of a network, nor does it teach the logical data parameters that would be needed to predict a topology in the absence of stable traffic monitoring data. Nothing in Pitchaikani et al. would lead one skilled in the art to such an arrangement. Instead, general descriptors of storing and displaying already available information regarding the logical and physical connections between devices on a network are provided. Therefore, it is submitted that the claims on file are neither anticipated nor obvious in view of Pitchaikani et al.

Applicant respectfully submits that Schenkel et al. does not disclose or teach a method or apparatus to predict the topology of a network in the absence of stable traffic monitoring data from the network devices. In fact, Schenkel et al. teaches away from the claimed invention by requiring a stable traffic monitoring data flow to predict the network topology. Col 3, lines 29 to 32 of Schenkel et al. confirms this by stating that "Each device in the network must have some activity whose rate can be measured. The particular activity measured in a device must remain the same for the duration of the sequence of measurements". In Schenkel et al. if a stable rate is not achieved, the topology of the network cannot be predicted. Specifically, Col 3, lines 50-52 states "Should the rates be so low that few intervals record any activity, more measurements may need to be recorded to reach a certain accuracy of topology discovery." Applicant further notes that the logical connection parameters needed in the present invention to predict the network topology are not disclosed nor taught in Schenkel et al.. Rather, the data utilized in Schenkel et al. to predict the network topology are limited to traffic monitoring data as specified in Col 4, lines 13-14: "All such activity which is measured should be construed in this specification as 'traffic'". Examples of such traffic data are mentioned in Col 4, lines 6-12. As such, nothing in Schenkel et al. would lead one skilled in the art to predict a topology of a network in the absence of stable traffic monitoring data. Therefore, it is submitted that the claims on file are neither anticipated nor obvious in view of Schenkel et al.

Applicant submits that none of Pitchaikani et al. or Schenkel et al., either alone or in combination, teach or suggest the invention recited in independent claims 1, 18 and 26, or any claims that depend from them.

In response to the Examiner's objection to Claims 1-11, 14-21, 24-27 stating that by combining the teachings of Pitchaikani and Schenkel would make obvious the processing of logical connection parameters to predict at least one physical connection between two of the ports, Applicant respectfully disagrees. Pitchaikani does not disclose the logical connection parameters used in the present invention to predict the network and Schenkel does not teach how to predict the topology of a network in the absence of data traffic monitoring.

In response to the Examiner's objection to Claim 12, 13, 24, stating that Pitchaikani et al. taught, according to Table 1, that at least one port within a plurality of nodes comprises a user label. Applicant respectfully disagrees because each of these claims adds further limitations for independent Claims 1, 18, 26 and should be allowable for the reasons stated above. Moreover, the identifiers in Table 1 relate to devices and not ports, providing further differentiation over the cited art.

In response to the Examiner's objection to claim 22, stating that it would be obvious to sort ports to place the ports in specific order for operation. Applicant respectfully disagrees because the said claim adds further limitations for independent Claims 1, 18, 26 and should be allowable for the reasons stated above.

In response to the Examiner's objection to claim 28, stating that it would be obvious to apply the teachings of Pitchaikani and Schenkel to all compatible networks. Applicant respectfully disagrees because the said claim adds further limitations for independent claims 1, 18, 26 and should be allowable for the reasons stated above.

As all the cited references fail to disclose the logical connection parameters used to predict a network topology, it is apparent that, even should the motivation to combine them exist, the resulting combination would not provide all the present claim limitations. Applicant therefore requests reconsideration of claims 1-22 and 24-28 and withdrawal of the rejections under 35 U.S.C. 103(a).

In view of the above amendments and discussion, the Applicants request early allowance of the amended application.

No fee is believed due for this submission. However, Applicant authorizes the Commissioner to debit any required fee from Deposit Account No. 14-1315. The Commissioner is further authorized to debit any additional amount required, and to credit any overpayment to the above-noted deposit account.

Yours very truly,

John C. Lynk et al.

By _____
Angela de Wilton
Reg. No 35,763

ADW/gap
c/o NORTEL NETWORKS LIMITED
Intellectual Property Law Group
P.O. Box 3511, Station "C"
Ottawa, Ontario, Canada K1Y 4H7

Phone: (613) 768-3020
FAX: (613) 768-3017

Date: July 27, 2005